WHAT IS CLAIMED IS:

1.   An image processing method comprising:

an input step of inputting image data obtained by photographing a photographic subject;

5   a first extraction step of analyzing said image data and extracting a characteristic amount in an anatomic area in a photographic subject image;

a second extraction step of extracting the characteristic amount in a preset area in said

10   photographic subject image;

a setting step of setting the characteristic amount in said photographic subject image based on a relation between the characteristic amount obtained by said first extraction step and the characteristic

15   amount obtained by said second extraction step; and

an image processing step of performing an image processing by using an image processing condition based on the characteristic amount set by said setting step.

20   2.   The image processing method according to claim 1 wherein said preset area in the photographic subject image includes an area set in accordance with a position of a photo timer.

25   3.   The image processing method according to claim 1 wherein said setting step comprises steps of:

obtaining a difference between the characteristic

amount obtained by said first extraction step and the characteristic amount obtained by said second extraction step; judging whether or not the characteristic amount obtained by said first extraction

5   step is appropriate based on the difference; and selecting the characteristic amount obtained by said first extraction step or the characteristic amount obtained by said second extraction step based on a judgment result.

10

4.   An image processing method for extracting a characteristic amount for use in a gray scale conversion processing from an object image, comprising:

an extraction step of extracting a plurality of

15   characteristic amounts from said object image; and

a selection step of selecting the characteristic amount for use in said gray scale conversion processing from the respective characteristic amounts obtained by said extraction step based on a result of comparison of

20   a difference among the respective characteristic amounts obtained by said extraction step with a predetermined threshold value.

5.   The image processing method according to claim

25   4 wherein said extraction step comprises a first extraction step of limiting a predetermined area of said object image and extracting a first characteristic

amount from the predetermined area, and a second
extraction step of extracting a second characteristic
amount from a fixed area of said object image, and

said selection step comprises a step of selecting
5   said second characteristic amount when a difference
between said first characteristic amount and said
second characteristic amount is larger than said
predetermined threshold value, and a step of selecting
said first characteristic amount when the difference
10   between said first characteristic amount and said
second characteristic amount is not larger than said
predetermined threshold value.

6.   An image processing method for extracting a
15   characteristic amount for use in a gray scale
conversion processing from an object image, comprising:
an extraction step of extracting at least a first
characteristic amount and a second characteristic
amount from said object image; and
20   a selection step of selecting the characteristic
amount for use in said gray scale conversion processing
from at least said first characteristic amount and said
second characteristic amount based on a result of
comparison of a difference between a pixel value
25   corresponding to a predetermined density value obtained
from a gray scale conversion curve defined by said
first characteristic amount, and said second

characteristic amount, with a predetermined threshold value.

7. The image processing method according to claim 6 wherein said extraction step comprises a first extraction step of limiting a predetermined area of said object image and extracting said first characteristic amount from the predetermined area, and a second extraction step of extracting said second characteristic amount from a fixed area of said object image, and

said selection step comprises a step of selecting said second characteristic amount as the characteristic amount for use in said gray scale conversion processing when a difference between the pixel value corresponding to said predetermined density and said second characteristic amount is larger than said predetermined threshold value, and a step of selecting said first characteristic amount or the pixel value corresponding to said predetermined density value as the characteristic amount for use in said gray scale conversion processing when the difference between the pixel value corresponding to said predetermined density value and said second characteristic amount is not larger than said predetermined threshold value.

8. An image processing apparatus comprising:

input means for inputting image data obtained by
photographing a photographic subject;

first extraction means for analyzing said image
data and extracting a characteristic amount in an
5   anatomic area in a photographic subject image;

second extraction means for extracting the
characteristic amount in a preset area in said
photographic subject image;

setting means for setting the characteristic
10   amount in said photographic subject image based on a
relation between the characteristic amount obtained by
said first extraction means and the characteristic
amount obtained by said second extraction means; and

image processing means for performing an image
15   processing by using an image processing condition based
on the characteristic amount set by said setting means.

9. An image processing apparatus for extracting a
20   characteristic amount for use in a gray scale
conversion processing from an object image, comprising:

extraction means for extracting a plurality of
characteristic amounts from said object image; and

selection means for selecting the characteristic
25   amount for use in said gray scale conversion processing
from the respective characteristic amounts obtained by
said extraction means based on a result of comparison

of a difference among the respective characteristic
amounts obtained by said extraction means with a
predetermined threshold value.

5   10.   An image processing apparatus for extracting
a characteristic amount for use in a gray scale
conversion processing from an object image, comprising:
         extraction means for extracting at least a first
characteristic amount and a second characteristic
10   amount from said object image; and
         selection means for selecting the characteristic
amount for use in said gray scale conversion processing
from at least said first characteristic amount and said
second characteristic amount based on a result of
15   comparison of a difference between a pixel value
corresponding to a predetermined density value obtained
from a gray scale conversion curve defined by said
first characteristic amount, and said second
characteristic amount, with a predetermined threshold
20   value.

         11.   An image processing program for executing a
method comprising:
         an input step of inputting image data obtained by
25   photographing a photographic subject;
         a first extraction step of analyzing said image
data and extracting a characteristic amount in an

anatomic area in a photographic subject image;

a second extraction step of extracting the characteristic amount in a preset area in said photographic subject image;

5   a setting step of setting the characteristic amount in said photographic subject image based on a relation between the characteristic amount obtained by said first extraction step and the characteristic amount obtained by said second extraction step; and

10   an image processing step of performing an image processing by using an image processing condition based on the characteristic amount set by said setting step.

12. An image processing program for executing a

15   method for extracting a characteristic amount for use in a gray scale conversion processing from an object image, said method comprising:

an extraction step of extracting a plurality of characteristic amounts from said object image; and

20   a selection step of selecting the characteristic amount for use in said gray scale conversion processing from the respective characteristic amounts obtained by said extraction step based on a result of comparison of a difference among the respective characteristic

25   amounts obtained by said extraction step with a predetermined threshold value.

13. An image processing program for executing a method for extracting a characteristic amount for use in a gray scale conversion processing from an object image, said method comprising:

5   an extraction step of extracting at least a first characteristic amount and a second characteristic amount from said object image; and

a selection step of selecting the characteristic amount for use in said gray scale conversion processing

10   from at least said first characteristic amount and said second characteristic amount based on a result of comparison of a difference between a pixel value corresponding to a predetermined density value obtained from a gray scale conversion curve defined by said

15   first characteristic amount, and said second characteristic amount, with a predetermined threshold value.